1125 to about nucleotide +38 of SEQ ID NO. 22 operatively linked to a nucleotide sequence encoding a heterologous polypeptide, wherein the heterologous polypeptide is an oncogenic protein and is expressed in neurons of the transgenic mouse at a level sufficient to induce tumor formation in said neurons.

41. (Twice Amended) A transgenic mouse generated by crossing a first mouse with a second mouse, wherein all of the germ cells and somatic cells of the first mouse contain a DNA sequence comprising a promoter of a β2-subunit of neuronal nicotinic acetylcholine receptor having the sequence from about nucleotide -1125 to about nucleotide +38 of SEQ ID NO. 22 operatively linked to a nucleotide sequence encoding a heterologous polypeptide, wherein the heterologous polypeptide is an oncogenic protein and is expressed in neurons of the first mouse, wherein the neurons of the transgenic mouse express the heterologous polypeptide at a level sufficient to induce tumor formation in said neurons.

46. (Twice Amended) A process for producing a neuronal host cell that expresses a heterologous polypeptide, comprising transferring to the neuronal host cell a DNA sequence comprising a promoter of a β2-subunit of neuronal nicotinic acetylcholine receptor having the sequence from about nucleotide -1125 to about nucleotide +38 of SEQ ID NO. 22 operatively linked to a nucleotide sequence encoding the heterologous polypeptide under suitable conditions to cause expression of the heterologous polypeptide by the neuronal host cell, wherein the heterologous polypeptide is an oncogenic protein or is encoded by a reporter gene.

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47. (Twice Amended) The process according to claim 46, wherein the heterologous polypeptide is an oncogenic protein.

51. (Amended) The process according to claim 46, wherein the nucleotide sequence encoding the heterologous polypeptide is a reporter gene.

54. (Twice Amended) The process according to claim 53, wherein the heterologous polypeptide is an oncogenic protein.

55. (Twice Amended) A process for producing a neuronal host cell that expresses a heterologous polypeptide, comprising:

introducing a DNA sequence into a mouse at an embryonic stage, wherein the DNA sequence comprises a promoter of a β2-subunit of neuronal nicotinic acetylcholine receptor having the sequence from about nucleotide -1125 to about nucleotide +38 of SEQ ID NO. 22 operatively linked to a nucleotide sequence encoding the heterologous polypeptide, wherein the heterologous polypeptide is an oncogenic protein or is encoded by a reporter gene; and

generating a transgenic mouse all of whose germ cells and somatic cells contain the DNA sequence and wherein the neurons of the transgenic mouse express the heterologous polypeptide.

56. (Amended) The process according to claim 55, wherein the nucleotide sequence encoding the heterologous polypeptide is a reporter gene.

58. (Twice Amended) The process according to claim 55, wherein the heterologous polypeptide is an oncogenic protein.

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59. (Amended) A transgenic mouse generated by crossing a first mouse with a second mouse, wherein the first mouse comprises germ cells, which contain a DNA sequence comprising a promoter of a β2-subunit of neuronal nicotinic acetylcholine receptor having the sequence from about nucleotide -1125 to about nucleotide +38 of SEQ ID NO. 22 operatively linked to a nucleotide sequence encoding a heterologous polypeptide, wherein the heterologous polypeptide is an oncogenic protein or is encoded by a reporter gene, wherein the heterologous polypeptide is expressed in neurons of the transgenic mouse and wherein the oncogenic protein is expressed at a level sufficient to induce tumor formation in said neurons.

60. (Amended) A transgenic mouse according to claim 59, wherein the nucleotide sequence encoding the heterologous polypeptide is a reporter gene.

62. (Amended) A transgenic mouse according to claim 59, wherein the heterologous polypeptide is an oncogenic protein.

REMARKS

Applicants respectfully request reconsideration of this application in view of the following remarks. Claims 40-47 and 51-62 are pending in this application.

Claims 40, 41, 46, 47, 51, 54-56, 58-60, and 62 have been amended. More specifically, claims 40, 41, 46, 47, 54, 55, 58, 59, and 62 have been amended by replacing "an oncogenic, tumorigenic, or immortalizing protein" with "an oncogenic protein." Applicants have made this amendment to simplify the claim language.

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